

REMARKS

Claims 1-23, 43-61 and 99-104 are pending in the application.

Claims 1-23, 43-61 and 99-104 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cui (U.S. Patent Publication No. 2004/0000321) as combined with Au (U.S. Patent Publication No. 20010010228); or over the combination of Cui and Au in further view of Rhieu (U.S. Patent No. 5,364,667. A proper obviousness rejection requires, *inter alia*, that the references disclose or suggest all the claim limitations. Claims 1-23, 43-61 and 99-104 are allowable over Cui, Au and Rhieu for at least the reason that the references, individually or as combined, fail to disclose or suggest each and every limitation in any of those claims.

Each of independent claims 1, 43 and 99 recites generating a plasma within a chamber with a cleaning gas from at least one plasma generating electrode external to the chamber and proximate an infrared radiation transparent wall effective to remove at least some deposit from the infrared radiation transparent wall. As acknowledged by the Examiner at page 3 of the present Action, Cui does not disclose or suggest the recited infrared radiation transparent wall(s). Au discloses a chamber having a quartz window. However, Au does not teach or suggest the claims 1, 43 and 99 recited at least one plasma generating electrode external to the chamber and proximate an infrared radiation transparent wall. Accordingly, the combination of Cui and Au does not teach or suggest the recited generating a plasma within a chamber with a cleaning gas from at least one plasma

generating electrode external to the chamber and proximate an infrared radiation transparent wall effective to remove at least some deposit from the infrared radiation transparent wall.

Rhieu discloses preventing clouding or depositing on transparent windows utilizing light pipes. Rhieu does not disclose or suggest the recited at least one plasma generating electrode external to the chamber and proximate an infrared radiation transparent wall. Accordingly, Rhieu does not overcome the deficiency of Cui and Au with respect to the recited generating a plasma within a chamber with a cleaning gas from at least one plasma generating electrode external to the chamber and proximate an infrared radiation transparent wall effective to remove at least some deposit from the infrared radiation transparent wall. Claims 1, 43 and 99 are not rendered obvious by Cui, Au and Rhieu for at least this reason.

In addition to the above, each of claims 43 and 99 recites a first and a second infrared radiation transparent wall, where heat is flowed to the substrate through the first wall and substrate temperature is detected by measuring emissivity through the second wall using a non-contacting emissivity sensor. None of the relied upon references, alone or in combination, discloses or suggests these recited features and claims 43 and 99 are additionally allowable for at least this reason.

Still further, each of claims 1, 43 and 99 recites depositing an elemental form of silicon-comprising material on a semiconductor substrate.

Not one of the recited references, alone or in combination, teach, suggest or enable this recited feature, as set forth in applicants previous response.

For at least these reasons, independent claims 1, 43 and 99 are allowable over Cui, Au and Rhieu.

Dependent claims 2-23, 44-61 and 100-104 are allowable over the cited combination of Cui, Au and Rhieu for at least the reason that they depend from corresponding allowable base claims 1, 43 and 99.

For the reasons discussed above, claims 1-23, 43-61 and 99-104 are allowable. Accordingly, applicant respectfully requests formal allowance of such claims in the Examiner's next action.

Respectfully submitted,

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